

# Loan Level Pricing: Do Your Homework To Be Competitive

*A myriad of factors should be examined - daily, if possible - when setting your loan prices.*

BY DEAN A. BROWN

Setting the price for your company's customers is probably the single most important activity performed on a daily basis in the mortgage business. Yet at most firms this activity receives little attention or consideration.

For example, once a general pricing level is established at most mortgage companies, a junior analyst or clerk is directed to print rate sheets from a spreadsheet system and forward them to all branches and wholesale customers. The thought process completed on a daily basis is not at all complex nor insightful.

This article points out concepts and issues that should be considered - on a daily basis if possible, or at least weekly - to remain competitive with your rates.

## **Calculating base pricing**

First, a discussion of what prices

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should be used to calculate "base pricing."

As you know, not all mortgages have the same value or investor base, nor are mortgages with the same investor and product type valued the same.

Loans are valued by the "market" on a loan level basis. This market price is divided into two basic components:

- the note, and
- the servicing value.

A loan's value on a loan level basis is determined by the product type (FNMA, FHLMC, jumbo, FHA, VA, private, etc.), term, coupon, documentation level, borrower purpose (refi vs. purchase), borrower intent (owner occupied vs. NOO), loan amount, LTV, property type (condo, single family, PUD, etc.), location, impounds, investor transfer fees - and the list goes on. Indeed, determining the loan level value on a particular mortgage is a complicated process.

Lets assume we are pricing a conforming (FNMA/FHLMC), 30-year fixed rate loan at 7.875% for the Burkle family in suburban Portland, Ore. The \$200,000 loan is for a fully documented, owner occupied purchase of a single-family residence. There is an 80% loan-to-value, full T&I impounds and no transfer fees.

This could be described as the per-

fect conforming loan in as much as it would provide the highest value from a servicing valuation perspective.

FIGURE 1 summarizes all applicable valuation assumptions for each sale execution option for this loan, excluding servicing and a breakdown of the pricing components.

As this table shows, on the day the loan was evaluated, the best execution price for the note portion of the loan was to sell it to FNMA with a guarantee fee buy-down. Hence, instead of putting the loan into a 7.0% coupon, it should be securitized into a 7.5% pool after buying down the guarantee fee by .085 basis points.

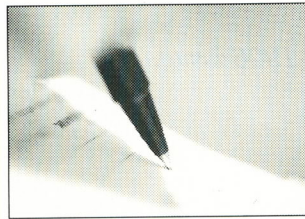
This delivery option was marginally better than the 7.0 coupon FHLMC PC by .01 points - not a very big margin. However, it was much better than executing a FNMA live or standard window sale by over .62 points!

If we assume that you would always sell to the best possible note alternative, then pricing the note's base from the best would be a reasonable thing to do.

On this basis, the base pricing would be 7.875 at .25 discount points after rounding down from .285.

However, if you could not always do this, an average approach might be used to determine the base pricing (average price = 99.4931 or .50 discount points).

**FIGURE 1: VALUATION ASSUMPTIONS FOR THE BURKLE FAMILY'S LOAN**



30 or 15 Year Best X?.....	30	<30/15	Settlement date .....	04/09/96
FHLMC Guarantee fee .....	0.23		Security settlement date.....	05/13/96
FNMA Guarantee fee.....	0.21		Coupon to be sold .....	7.00
Bid - Ask Spread (ticks) .....	.2		Range of Notes .....	7.500 - 7.875
Use Calc'd Security Buyup?.....	yes	<yes/no	Use Calc'd Security Buydown? .....	yes
Buyup Ratio used.....	4.563		Calc'd Security Buydown Ratio .....	4.813
Cost of Funds.....	6.250		Cash delivery servicing amount .....	0.25
Serv. Val. Sprd. FNMA/FHLMC.....	0.000			

(Indicate Marginal Value of FNMA Serv. over FHLMC)

**BEST EXECUTION**

Note Rate	Delivery	Sec Cpn	Standard G. Fee	Buyup/Buydown	Total G. Fee	BU G. Fee Factor	BD G. Fee Factor	Servicing	Pass-Thru Rate	Excess	Capitalized Excess / Price Impact	Security or 5-Day Price	Interest Differential	TOTAL	Best X
7.875	FNMA G.F. B/D	7.50	0.210	-0.085	0.125		4.45	0.250	7.500	0.0000	-0.3783	100.0938	N/A	99.7155	BEST
7.875	GOLD PC	7.00	0.230					0.250	7.000	0.3950	1.8022	97.9063	N/A	99.7084	0.01
7.875	FNMA MBS	7.00	0.210					0.250	7.000	0.4150	1.8934	97.8125	N/A	99.7059	0.01
7.875	FHLMC G.F. B/D	7.50	0.230	-0.105	0.125		4.80	0.250	7.500	0.0000	-0.5040	100.1875	N/A	99.6835	0.03
7.875	FNMA G.F. B/U w/EXCESS	7.00	0.210	0.165	0.375	4.15		0.250	7.000	0.2500	1.8254	97.8125	N/A	99.6379	0.08
7.875	FHLMC G.F. B/U w/EXCESS	7.00	0.230	0.145	0.375	4.00		0.250	7.000	0.2500	1.7208	97.9063	N/A	99.6269	0.09
7.875	GOLD CASH LIVE		0.000					0.250	7.625	0.0000	0.0000	99.4540	-0.1516	99.3024	0.41
7.875	FNMA LIVE		0.000					0.250	7.625	0.0000	0.0000	99.2508	-0.1516	99.0992	0.62
7.875	FNMA STANDARD		0.000					0.250	7.810	-0.1850	-0.8903	100.0000	-0.1516	96.9581	0.76

Either way, the base price has been established for the immediate time period from which other adjustments can be made.

Important: If you have decided to price from the best possible price on the rate sheet for each marketing program, then most adjustments will be for increasing the points paid by customers. For example, longer lock periods will have higher points, as will cash-out refinances on non-owner occupied loans under \$100,000.

The point to make here is that if you price the rate sheet for your average loan, you will end up generating below-average loans due to the competitive structure of the mortgage business. Borrowers, when fully informed, generally do not prefer to pay more than they have to.

**Price for lock periods**

Now that we have a base price of 7.875% at .25 points for the immediate price we can focus on pricing for various lock periods.

The common method for accomplishing this is to simply take the security roll between months and add it to the discount for a loan.

For example, if the price for a FNMA 7.5 was 100 for April and 99+26/32 for May, the roll is 6/32 per month or .1875 points.

Hence, a 30-day lock would be priced at .375 rounded down from .4375, and a 60-day lock would be priced at .625.

The problem with calculating the forward lock price in this way is that it does not take into consideration any additional risk involved with longer term locks. Longer term locks have a higher degree of risk, based on the extended time the loan's value is exposed to price volatility and the borrower's closing rate uncertainty. (The closing rate uncertainty can come from the source of business, the intent or purpose of the loan, or how far the loan has progressed in the processing timeline.)

These elements must be estimated and adjustments made accordingly.

The adjustments for the price element should come from an Option Adjusted Spread (OAS) model, while the closing risk adjustment would be determined from a detailed fallout analysis - such as using a state-of-the-art neural network approach.

For example, the 60-day lock might be adjusted by .05 points for the OAS component and .185 points for the lock risk component, for a total of .25 points additional.

Hence, the fully adjusted 60-day base lock price would be 7.875% at .875 discount points before servicing.

**Figure servicing value**

The servicing component of the loans' value needs to be determined by either:

- internally valuing the servicing income stream, or
- selecting the best price for the

servicing from all available buyers and sale executions types e.g., whole loan sale, assignment of trade, table funding, etc.

A surprisingly often ignored, but important, factor in this evaluation is the investor transfer fee(s). For example, a \$150 transfer fee represents only .075 points for a \$200,000 loan; however, it is a much higher .20 points on a \$75,000 loan.

As a part of selecting the best possible price for the servicing, we need to consider the fact that most servicing buyers have a range of pricing, not just one value. For example, FIGURE 2 indicates a sample conforming loan servicing pricing table published by a leading correspondent lender. The biggest adjustment for servicing value by the investor is the loan amount, which ranges from paying them .50 points for loans under \$20,000 to receiving 1.8 points for loans over \$180,000.

Other common adjustments for this type of loan include: short-term interest rate buy-downs, condos, high LTVs, T&I impounds, documentation level, and property location.

For the Burkle's, none of the adjustments apply due to the assumptions outlined. Hence, the base price of the loan would be 7.875% at -.875 points after rounding down from -.9250 (1.8 servicing points minus .875 discount points).

This pricing level might be fine if your company can survive on loan

origination and miscellaneous fees; however, most firms cannot and must retain a servicing spread to cover costs and make a profit.

If the after-tax goal of the company is to make 25 basis points after servicing, and the marginal tax rate is 50%, and costs equal origination and miscellaneous fees, the price for the loan might be 7.875% and a .375 point rebate to the borrower.

**Also consider...**

Other considerations include:

- Does the pricing level determined above generate sufficient volume? Or too much volume?
- Would a higher price decrease

volume by more than the additional revenue generated?

■ Would a lower price increase volume by more than the reduced revenue per loan?

■ Is the processing timeline for the type of loan and lock period reasonable, given the current average time periods to process the loan?

■ Does the firm need to get market penetration or increase market share?

■ Does the company's pricing policy square up with CRA requirements?

These and many other considerations should be reviewed and analyzed periodically to further enhance your competitive position. The point is this: do your homework when it comes to pricing. SME

**FIGURE 2: SERVICING PRICES**

*Sample servicing prices for conforming loans.*

LOAN AMOUNT		FNMA/FHLMC 25/30 Year FIXED (N, G)
180,001	Limit	1.800
170,001	180,000	1.750
160,001	170,000	1.650
150,001	160,000	1.650
140,001	150,000	1.650
120,001	140,000	1.550
100,001	120,000	1.500
95,001	100,000	1.400
80,001	95,000	1.400
70,001	80,000	1.300
60,001	70,000	1.200
50,001	60,000	1.100
45,001	50,000	1.000
40,001	45,000	0.800
30,001	40,000	0.300
20,001	30,000	0.000
15,000	20,000	(0.500)